## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008561 Address: 333 Burma Road **Date Inspected:** 17-Aug-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Xu Yumin **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

# **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Utekar Shrikant was present during the times noted above for observations relative to the work being performed.

# TRIAL ASSEMBLY YARD

This QA Inspector randomly observed the following work in progress.

## **OBG SEGMENT-1AA E-1AE-1BE**

SMAW welding process of weld joint 005 located on PCMK OBE1. Welder is identified as 045196 ZPMC QC is identified as Pan Wen Long. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F) Repair. The weld repair report noted as B-WR6869.

FCAW welding process of weld joint 507 located on PCMK SEG2E. Welder is identified as 045240 ZPMC QC is identified as Pan Wen Long. The welding variables recorded by QC appeared to comply with the WPS-B-T-2233-B-U3-F.

FCAW welding process of weld joint 541 located on PCMK SEG2E. Welder is identified as 050316 ZPMC QC is identified as Pan Wen Long. The welding variables recorded by QC appeared to comply with the WPS-B-T-2233-B-U3-F.

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FCAW welding process of weld joint 518 located on PCMK SEG2E. Welder is identified as 045138 ZPMC QC is identified as Pan Wen Long. The welding variables recorded by QC appeared to comply with the WPS-B-T-2233-B-U3-F.

SMAW welding process of weld joint 001 located on PCMK OBE1. Welder is identified as 045196 ZPMC QC is identified as Pan Wen Long. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

#### **OBG SEGMENT-5BW-5CW**

FCAW welding process of weld joint 007 located on OBW5. Welder is identified as 220066ZPMC QC is identified as Pan Wen Long. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2A-F3.

FCAW welding process of weld joint 008 located on OBW5A. Welder is identified as 220067ZPMC QC is identified as Pan Wen Long. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-T-1.

## **INCIDENT**

## **OBG SEGMENT-4AW**

This Caltrans Quality Assurance inspector (QA) observed that the contractor has performing base metal repair on OBG segment 4AW adjacent to the weld SEG017B-004 at the intersection of PP025 and W3. This QA observed that the contractor has gouged all the way through the thickness of the top flange of longitudinal diaphragm (LD5E) and placed a backing bar on the underside of the repair area. The backing was removed after the welder ran several weld passes in the groove. The repair excavation is measures approximately 100x75mm and 25mm deep (flange thickness = 25mm). This base metal repair was performed without the approval of the Engineer. For additional information see attached pictures. Incident report was send to task leader and other supervisor.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.

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# **Summary of Conversations:**

No relevant conversation

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Jim Simonis - 134-7246-3441, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar, Shrikant	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer